

GAS EXPORT SPOTLIGHT:

OPERATIONAL
PROBLEMS AT

CAMERON LNG

AND

CALCASIEU PASS

More LNG ? NO FRACKING WAY
SAVE THE GULF



LOUISIANA
**BUCKET
BRIGADE**

INTRODUCTION

The gas export industry and the state of Louisiana have a plan to radically transform the Louisiana coast. In Cameron and Calcasieu Parishes, the industry plans to build or expand ten gas export facilities, known as liquefied natural gas terminals (LNG). Another three facilities are proposed in the southeastern part of the state.

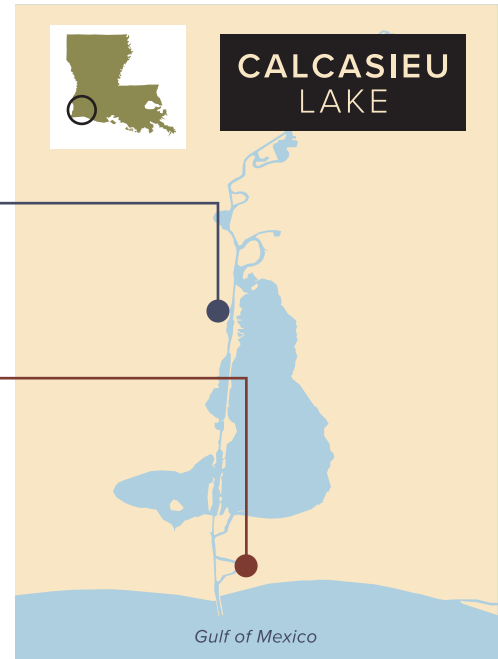
This report is an examination of two such terminals already operating in Cameron Parish:

**SEMPRA ENERGY'S
CAMERON LNG**

and

**VENTURE GLOBAL'S
CALCASIEU PASS**

These two facilities, located on opposite ends of Calcasieu Lake, are consistently polluting and regularly flouting laws designed to protect us. If just two gas export terminals are making Cameron Parish uninhabitable and increasing the vulnerability of Calcasieu Parish, what are the consequences of building eight additional facilities?



METHODOLOGY

The information in this report has been compiled from the following sources:

The facilities' accident reports to the Louisiana Department of Environmental Quality (LDEQ).

Cameron LNG: May 2019 - December 2022

Calcasieu Pass: January - December 2022

The Environmental Protection Agency's (EPA) Emission Inventory Permit Consistency Review, and subsequent Notice of Violation and Administrative Order on Consent sent to Sempra Energy Cameron LNG for violation of the Clean Air Act and the requirements of its Title V Air Permit.

Documentation and testimony from neighbors of Venture Global's Calcasieu Pass site.

Map courtesy of Vecta.io



FINDING #1

BOTH FACILITIES

FAIL TO REPORT

POLLUTION AND

ACCIDENTS

Cameron LNG has been cited for its failure to adhere to emissions reporting requirements. Consistent flaring at Venture Global's Calcasieu Pass is at odds with the company's failure to file reports to the Louisiana Department of Environmental Quality. Neighbors of the facility continue to document frequent and persistent flaring at all hours. Flaring at liquefaction facilities is used as an emergency mechanism, and its frequent utilization indicates that Venture Global has operational problems that it is failing to report to authorities.

FINDING #2

GAS EXPORT TERMINALS POSE

TREMENDOUS HAZARDS

Records from Cameron LNG and testimony of those living near Venture Global's Calcasieu Pass document regular spills of methane and benzene into the atmosphere, uncontrolled flaring, constant equipment failures, and weather-inflicted damage. These two facilities account for only a fraction of the proposed gas export buildout in Louisiana, yet the damage is immense.

FINDING #3

NEED

FEDERAL

INTERVENTION

The state of Louisiana has issued four warning letters to Cameron LNG regarding accidents at the facility since export operations began in 2019, but Cameron LNG has not faced any consequences for its poor operations and reporting failures. Federal intervention is urgent.

FINDING #4

UNLESS ACTION IS TAKEN,
COMMERCIAL FISHING AND
OUTDOOR RECREATION ACTIVITIES
WILL BECOME IMPOSSIBLE IN
CAMERON PARISH

GAS EXPORT FACILITIES

WILL MAKE THE AREA AN

INDUSTRIAL WASTELAND

Documentation from Venture Global neighbors notes the threats to birds and fishing grounds in the area. Venture Global has taken over boat launches in Cameron Parish, preventing fishermen from accessing the Gulf.

ANALYSIS OF

CAMERON LNG

- First gas shipment for export: May 31, 2019
- Start of full commercial operations: August 10, 2020
- Cameron LNG currently has the fourth largest export capacity of all LNG facilities in the country, with a maximum capacity of 14.5 million tons per annum (MTPA). Cameron LNG is seeking to expand, which would increase total export capacity to 21.2 MTPA by 2026.

PROBLEM #1

CAMERON LNG HAS HAD PERSISTENT EQUIPMENT FAILURE SINCE OPERATIONS BEGAN

*Cameron LNG has had **67** total accidental releases since export operations began. On average, this amounts to nearly **two accidental releases per month** at the facility.*



**THERMAL
OXIDIZER TRIPS
SINCE 2019**

Accidents at Cameron LNG are largely attributable to repeated failure of the same equipment, the thermal oxidizers. Since July 2019, there have been 48 accidents due to trips of the thermal oxidizers, accounting for 72% of the facility's reported spills. Each instance results in a release of gases, including methane, a greenhouse gas more powerful than carbon dioxide, volatile organic compounds (VOCs), and hazardous air pollutants such as benzene, which is known to depress the nervous system and cause cancer in humans. On average, accidents caused by thermal oxidizer failures have taken place once a month since the facility began export operations. The Louisiana Department of Environmental Quality has conducted two investigations, both concluding that Cameron LNG had not complied with its air permit.¹ However, there has been no penalty incurred for the violations.

In its responses to LDEQ's warning letters, Cameron LNG officials claim to have conducted "extensive research" and taken corrective actions to remediate thermal oxidizer issues, most recently stating that these measures resulted in the facility operating from September 2021 to May 2022 without a reportable accident caused by its thermal oxidizers.² However, this is misleading as Cameron LNG experienced failures in thermal oxidizers on 9/28/2021, 11/6/2021, and 2/3/2022.³

Furthermore, four incidents of thermal oxidizer trips between June and August 2022 resulted in the following accidental release totals.⁴

**23,614.36 lbs
METHANE**

**3.608.92 lbs
BENZENE**

**696.53 lbs
VOCs**

This indicates that the remedial action claimed to be undertaken by Cameron LNG has not solved its repeated problems with its thermal oxidizers.

¹ LDEQ Office of Environmental Compliance, Incident Investigation Report. DocID 12565419, January 6, 2021. DocID 13347259, December 5, 2020.

² Cameron LNG, "Re: Warning Letters; Enforcement Tracking Number AE-L-22-00543" August 4, 2022 <https://edms.deq.louisiana.gov/app/doc/view?doc=13434118>

³ LDEQ Incident Reports T-205047, September 28, 2021. T-205755, November 6, 2021. T-207206, February 3, 2022.

⁴ LDEQ Incident Reports T-209147, June 15, 2022. T-209382, July 1, 2022. T-209478, July 8, 2022. T-210278, August 30, 2022.

PROBLEM #2

CAMERON LNG IS NOT PREPARED FOR LOUISIANA'S SEVERE WEATHER

Cameron LNG's reports note that damage sustained during Hurricane Laura in 2020 left the facility non-operational, and the response was to dump gas into the air.⁵ Over 217 tons of gases were vented into the atmosphere in the course of two days due to a damaged pressure release valve.⁶ Greenhouse gases released from this accident are equivalent to what would be generated from the electricity use of nearly 1000 homes for a year.

On January 6th, 2021, the facility's thermal oxidizers shutdown because of wind gusts. Reports to the State cite "inclement weather" causing a major release of methane, benzene, and VOCs.⁷ Weather data from this date shows that wind gusts of 43 mph were recorded in Cameron Parish at 8:00pm, while facility reports indicate the thermal oxidizer tripped at 8:48pm, meaning that the accident was triggered during a short period of strong winds. The total amount of gases released from this accident is:

87,335 lbs
METHANE

136 lbs
BENZENE

1,334 lbs
VOCs

This is equivalent to the greenhouse gases released by powering nearly 200 homes for a year.



⁵ EPA, Cameron LNG Facility Report, September 1, 2020. <https://edms.deq.louisiana.gov/app/doc/view?doc=12427972>

⁶ LDEQ, Single Point of Contact Report, September 4, 2020. <https://edms.deq.louisiana.gov/app/doc/view?doc=12561045>

⁷ LDEQ, Single Point of Contact Report, January 12, 2022. <https://edms.deq.louisiana.gov/app/doc/view?doc=12702711>

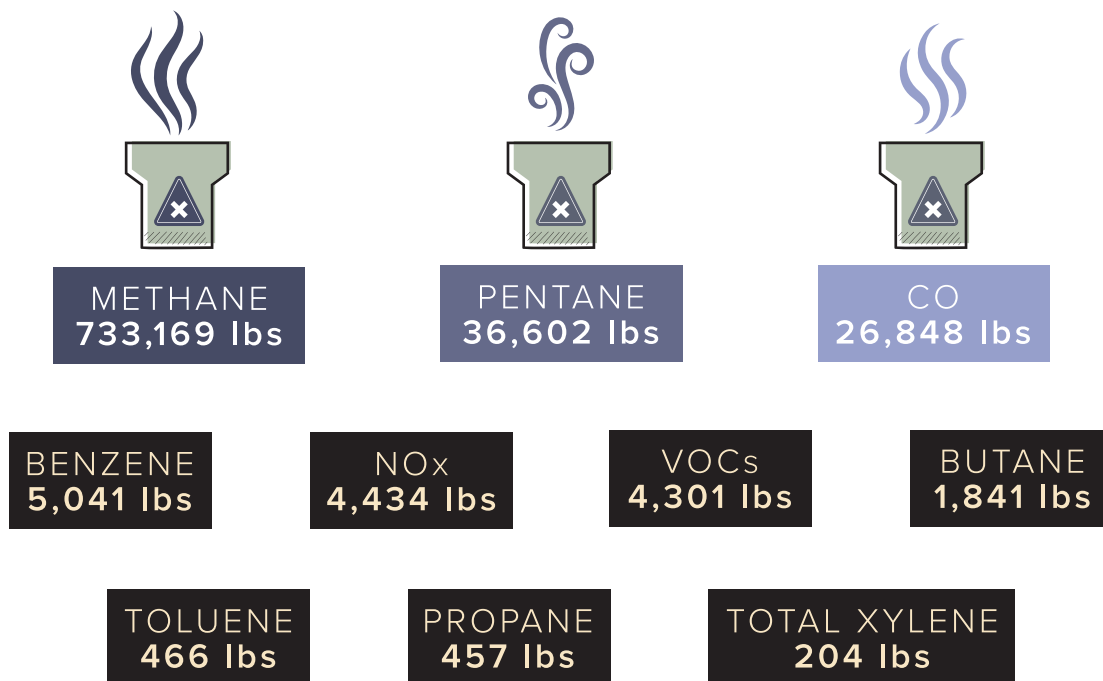
PROBLEM #3

CAMERON LNG HAS RELEASED HUNDREDS OF TONS OF POLLUTANTS THAT INCLUDE GREENHOUSE GASSES AND CARCINOGENS

The following are releases from reported accidents at the facility from August 2019 to December 2022.⁸ This does not include ongoing permitted emissions.

Cameron LNG provided emissions totals in the reports of only 44 of 67 accidents. Those reported emissions are detailed below, however 23 reports without release totals means the actual amount of accidental emissions is higher.

These totals are equivalent to the same amount of greenhouse gases as nearly 2,000 cars running for a year.



⁸ LDEQ, Electronic Data Management System (EDMS), AI #99407
<https://edms.deq.louisiana.gov>

PROBLEM #4

CAMERON LNG HAS BEEN VIOLATING THE CLEAN AIR ACT BY MISCALCULATING AND UNDER-REPORTING ITS ACTUAL EMISSIONS

Of the 67 accident release reports summarized in the previous table, 44 had incomplete information, meaning that the actual emissions are higher than the reporting indicates.

The EPA has found Cameron LNG to have violated the terms of its air permits and the Clean Air Act for underreporting its sulfur dioxide emissions by over two tons in 2019. The company also failed to report the facility's actual emissions for volatile organic compounds (VOCs), nitrogen oxide, particulate matter (both PM10 and PM2.5), ammonia, and carbon monoxide.⁹

While Cameron LNG was ordered to fix its miscalculations, the company faced no penalty for the violations and no order to properly report in the future.



⁹ EPA, Enforcement and Compliance Documents, Cameron LNG
CAA Notice of Violation and Opportunity to Confer, April 25, 2022.
CAA Administrative Order on Consent, October 27, 2022.

CALCASIEU PASS

- Start of gas export production: Jan 19, 2022

- First shipment: Feb 3, 2022

- Calcasieu Pass, the most rapidly constructed export facility in history, is owned and operated by Venture Global LNG. This company is aggressively expanding its footprint in Louisiana, with a total of four proposed sites within the state (summarized in the table below). While the company touts the hasty construction of its sole currently operating facility, Calcasieu Pass' short history of operation is rife with flaring and accidents. Note that of all of Venture Global's proposed export terminals, Calcasieu Pass has an export capacity far below that of every other site.

VENTURE GLOBAL GAS EXPORT SITES PROPOSED IN LOUISIANA



CALCASIEU PASS CAMERON PARISH

STATUS: **OPERATIONAL**
CAPACITY IN MILLION TONS
PER ANNUM (MTPA): **12**



CP2 CAMERON PARISH

STATUS: **PRE-CONSTRUCTION**
ESTIMATED START YEAR: 2026
CAPACITY IN MILLION TONS
PER ANNUM (MTPA): **28**



PLAQUEMINES LNG PLAQUEMINES PARISH

STATUS: **UNDER CONSTRUCTION**
ESTIMATED START YEAR: 2024
CAPACITY IN MILLION TONS PER
ANNUM (MTPA): **23**



DELTA LNG PLAQUEMINES PARISH

STATUS: **PRE-CONSTRUCTION**
ESTIMATED START YEAR: 2024
CAPACITY IN MILLION TONS
PER ANNUM (MTPA): **24**

PROBLEM #1

VENTURE GLOBAL CONTINUES TO UNDER-REPORT ACCIDENTS AT THE **CALCASIEU PASS** FACILITY

Our July 2022 Gas Export Spotlight Report detailed the discrepancy between reported accidents at the facility and the flaring. Since May 31, 2022 Venture Global has only reported two accidents related to air emissions at the facility, despite the fact that use of the flare has not diminished in this time.

Flaring at gas liquefaction facilities like Calcasieu Pass is used as an emergency mechanism, and periods of very high flaring are associated with shutdowns or operational problems.¹⁰ The lack of accident reports at the facility while it flares regularly indicates that Venture Global is under-reporting its operational problems.

WASTING NATURAL RESOURCES

The flaring from both Cameron LNG and Venture Global's Calcasieu Pass is a tremendous waste of gas. While oil and gas companies point to global energy shortages as a reason to streamline the construction of gas export facilities, the regular flaring and venting from these facilities is an immense waste of valuable resources.

According to the International Energy Agency, emissions from flaring and venting can double the actual greenhouse gas associated with the liquefaction process.¹¹ This is further evidence that gas is not a clean energy alternative, despite the industry's attempted greenwashing with use of the term "natural" gas.



Ground flares at Cameron LNG site

¹⁰ Charles, John-Henry and Davis, Mark. 2020. Transparency into gas flaring within the global LNG supply chain. 6. Capterio. <http://flareintel.com/wp-content/uploads/2021/07/20210723-Capterio-article-Transparency-into-gas-flaring-within-the-global-LNG-supply-chain-final.pdf>

¹¹ IEA (2022), *Flaring Emissions*, IEA, Paris. <https://www.iea.org/reports/flaring-emissions>

PROBLEM #2

DOCUMENTATION BY NEIGHBORS DEPICTS CONSTANT FLARING AT **CALCASIEU PASS** FACILITY

Cameron residents living near Venture Global's Calcasieu Pass terminal have had their lives completely disrupted since the facility began operations. Three residents living within one mile of the east and west-side of Calcasieu Pass have documented their experiences. All of them detailed constant flaring at the facility, often going on for days with little or no break, and at all hours. The roaring sound of the flare can be heard from the residents' properties for long periods during the day and night. Nighttime flaring at Calcasieu Pass completely lights up the surrounding areas, as can be seen in neighbors' photos.



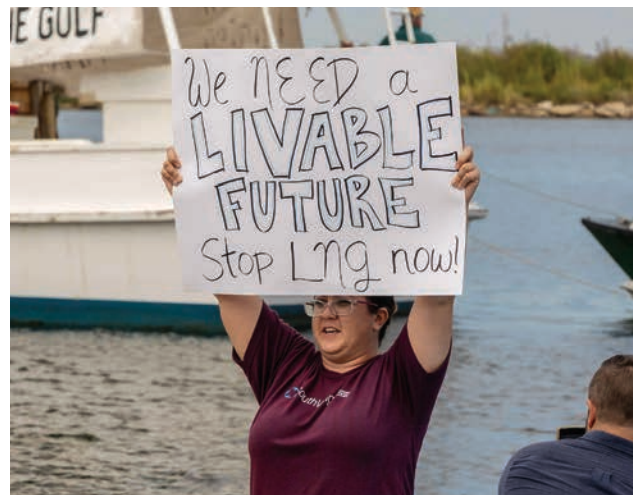
PROBLEM #3

VENTURE GLOBAL'S DREDGING IS DAMAGING THE BEACH, BOATS, SEAFOOD AND SEA LIFE

Maintenance dredging at the facility's marine berth caused mud and silt to wash up on a neighboring resident's property in August this year, covering the beachfront. Though the resident contacted the National Marine Fisheries Service about this, no action was taken to prevent a recurrence.



According to a local fisherman, construction of Calcasieu Pass choked off access to commercial fishing grounds near the facility, and its operation presents new dangers to fishing boats sharing the waterway. The construction of the entire proposed gas export buildout in Cameron Parish would completely eliminate what remains of the local fishermen and seafood industry.



RECOMMENDATION

The plan to concentrate gas export terminals in southwest Louisiana will turn our home into an industrial wasteland, relegating Louisiana - a state that is already poor - to the status of a colony that supplies other, richer countries with gas.

The good news is that there is still time to stop this radical plan to transform our coast. All relevant local, state and federal agencies should immediately cease issuing permits for gas export facilities. These agencies include the:

LOCAL & STATE AGENCIES

CAMERON
POLICY JURY

LA DEPT. OF
ENVIRONMENTAL QUALITY

DEPT. OF
WILDLIFE & FISHERIES

DEPT. OF
NATURAL RESOURCES

FEDERAL AGENCIES

ARMY CORPS
OF ENGINEERS

ENVIRONMENTAL
PROTECTION AGENCY

DEPARTMENT
OF ENERGY

FEDERAL ENERGY
REGULATORY COMMISSION

Instead of permitting the destruction of coastal southwest Louisiana, all levels of government should instead work toward rebuilding and strengthening Cameron Parish, with a focus on the fishermen whose livelihoods are threatened by the gas export industry.

Without government action to protect our fragile coast and the people who live here, the population of Cameron Parish will continue to be decimated. Recreational and commercial fishing, shrimping and oystering will be destroyed. Our Louisiana culture that relies on this seafood will be destroyed, too.



CONCLUSION

While operations at two facilities are severely disrupting residents' livelihoods and threatening them with displacement from their homes, the approval and construction of new export terminals and expansions to existing ones will make the situation much worse. The proposed Commonwealth LNG and Venture Global's CP2 facility would be placed directly adjacent to Calcasieu Pass. The irreversible damage from this buildout would make Cameron Parish a wasteland. The situation is dire, especially in the context of state and federal agencies that protect industry instead of the public.

The residents of Cameron and Calcasieu, along with other coastal communities threatened by the construction onslaught, deserve protection. More gas terminals would sacrifice the livelihoods of local fishermen, decimate the region's wildlife, and make storms and pollution much worse.

LOUISIANA IS WORTH **MORE THAN THIS**

THE STATE SIMPLY **CANNOT AFFORD** TO BUILD MORE EXPORT TERMINALS

